

## **CONCEPT PAPER: THE TRANSCONTINENTAL CYBERSPACE RAILROAD**

**An excerpt from “Resolving the Digital Divide: Information, Access, and Opportunity”, Conference Report of The President’s Information Technology Advisory Committee, February 2000**

### **Resolving the Digital Divide Demands a National Initiative**

It is certain that we need clearly articulated national goals and public/private partnerships to solve the digital divide. One program discussed at the conference, entitled the “Transcontinental Cyberspace Railroad” is based on the need to diffuse technology and give underserved communities the technology tools necessary to transcend their present socioeconomic condition. “People who are the most disadvantaged socially need the most developed information technology”. Underserved communities should benefit from cutting edge technologies in public libraries, community technology centers, and homes. Outdated hardware and software are not appropriate for the needs of these communities. It is recommended that the “Transcontinental Cyberspace Railroad” model be used to create the widespread use of a national technology diffusion initiative designed to target underserved areas and to accelerate their technological development through the organization of technology markets.

### **Statement of Purpose**

The Transcontinental Cyberspace Railroad is a national advanced technology diffusion initiative whose mission is to bring next generation multimedia information technologies to historically underserved communities located throughout the United States and related territories. The purpose of this initiative is to insure that those communities who have historically been the last to receive the socioeconomic and educational benefits of the new technologies are platformed on the most advanced technologies and are empowered to use them through best practices to determine their futures.

### **Statement of Need**

The rapid proliferation of community technology centers (CTC’s) is a first step towards meeting the needs of underserved communities who need access to computers and the Internet. Upon examination of the level of technology, the standards of the programs and services offered, the state of professional practice and operation across the different CTC initiatives, it becomes evident that the rapid spread of CTC’s has resulted in the uneven distribution of technology in these underserved communities.

The problem facing all the CTC’s, whether they are a part of CTCnet, Neighborhood Networks, the National Urban Technology Centers, the Computer Clubhouse Network, the National Urban League or they are independent, is that they are currently faced with the challenge of how to gain access to broadband, wireless and Internet 2 (I2) technologies and the programs, services, content, tools and capabilities they make possible.

The strategic diffusion of the Internet 2 and other related broadband and wireless multimedia telecommunications technologies into the CTC's, and then into the schools, afterschool programs, libraries, community centers, community-based organizations (CBO's), small businesses, local malls and the homes in these communities can leapfrog these communities into the 21st century and galvanize them into emergent technology markets.

### **Consortial Organization**

The Transcontinental Cyberspace Railroad as an organization will have three operational components: a non-profit research and development organization made up of a number of regional consortia; a national community technology development bank which will accept funds from both philanthropic and corporate givers and a venture funded for-profit subsidiary corporation which will provide advanced domestic technology transfer services to the CTC-centric new markets.

The consortium will raise through various sources a total of 20 million dollars over 5 years in order to finance this initiative. Seed funding will be sought from the Dept. of Education's Broad Agency Announcement, "America's Connects Consortium". This amount will total approximately 8 million dollars over 4 years. The other 12 million dollars will be raised from a variety of sources including venture capital funds as well as corporate and philanthropic sources as yet to be identified.

For the purposes of managing, administrating, fundraising, and implementing the initiative, the consortium will create a non-profit 501C3 corporation: The Transcontinental Cyberspace Railroad Corporation which will also own the national community technology development bank and the venture funded for-profit subsidiary. The Transcontinental Cyberspace Railroad will be located in Internet-ready office space located in the Upper Manhattan Empowerment Zone's new HIWay 125 Technology District and will have virtual offices at each partner site via real-time collaborative technologies.

### **Project Administration**

The lead organization in the Consortium will be the Institute for Learning Technologies, a joint research and development institute of Teachers College and Columbia University.

The Institute for Learning Technologies will be responsible for organizing the core group of prospective consortium members, the corporate formation of the Transcontinental Cyberspace Railroad as a non-profit spin-off operation, the brokering of Columbia University resources pertinent to the effort as well as creating and maintaining a clearinghouse of best practices and projects.

The other Consortium members are as follows:

### **New York City and State**

- The Abyssinian Development Corporation
- Playing 2 Win
- The Center for Urban Youth and Technology, SUNY-Albany
- Upper Manhattan Empowerment Zone/ HIWay 125 Technology District
- SEEDCo.
- Advanced Network and Services

### **California**

- George Lucas Educational Foundation
- Plugged In
- StudioMiramar, Producers of the “Digital Divide” documentary on PBS
- Knowledge Enterprises Networks
- Institute for Research on Learning
- Silicon Valley Community Ventures

### **District of Columbia**

- The Children’s Partnership
- Joint Center for Political and Economic Studies

### **Prospective Corporate Partners**

- Cisco Systems
- DME Interactive Holdings
- AOL/ Time-Warner
- Daimler-Chrysler

### **Charter University Partners**

- Advanced Technology Center, University of Missouri-Columbia
- University of Illinois at Chicago CAVE Advanced Virtual Reality Environments
- Mississippi State University School of Engineering